

REMARKS

Please reconsider the application in view of the above amendment and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 15-24 and 28-37, 47, 48, and 50 are pending in the application. Claim 47 is independent. The remaining claims depend, directly or indirectly, from claim 47.

Rejections under 35 U.S.C. § 103

Claim 47 stands rejected under 35 U.S.C. § 103 as unpatentable over Hudson. Claim 47 has been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claim, the rejection is respectfully traversed.

Claim 47, as amended, recites a method of forming a drill bit structure comprising machining a plurality of holes in preselected locations in the drill bit structure, positioning a spacer insert in each of the plurality of holes, applying a hardfacing material over at least a portion of an outer surface of the drill bit structure wherein at least a portion of the spacer is covered after application of the hardfacing material, removing the plurality of spacer inserts from the plurality of holes, and positioning drilling inserts in each of the plurality of holes.

Hudson discloses a method for manufacturing an apparatus wherein a hole within the surface of the apparatus is plugged and hardfacing material is applied to the surface around the plug.

Hudson neither discloses or suggests applying the hardfacing material so that the plugs are substantially covered or exposed. Rather, Hudson discloses only applying hardfacing material to the surface *around* the plug. Hudson explains that leaving the area around the plug free of hardfacing allows the cutting inserts to be retained by the tension generated in the cutter member as the inserts are pressed therein (col 4, lines 56-62). Hudson also discloses that in order to further ensure the necessary tension force is maintained, a scraping tool (*see* Hudson Figure 4-C) is used after hardfacing material application to remove any hardfacing material in the annular area around the plug. Hudson maintains that hardfacing the complete surface would destroy the ability of the cutter member to provide the tension force necessary to maintain the insert and would also result in stress cracks (col 5, lines 36-39).

In contrast, claim 47 allows the hardfacing material to be applied so that at least a portion of the spacer insert is covered by the hardfacing material. The specification explains that in one embodiment of the claimed invention, hardfacing material is applied to the surface of the drill bit so that the spacer inserts may be substantially covered after the application of the hardfacing material. The spacer inserts are then removed, and the cutting element inserts are affixed in the holes by brazing or other means known to the art (page 10, para. 0038). This method is advantageous because applying the hardfacing material so that the spacers are at least partially covered increases the speed of application of the hardfacing material as the operator does not have to spend as much time avoiding application of the hardfacing materials to certain areas. Also, this method of applying hardfacing material helps ensure that a substantially even coating of hardfacing material is applied. In view of the above, Hudson fails to show or suggest the present invention as recited in claim 47 as amended. Thus, claim 47 as amended is

patentable over Hudson. Dependent claims are allowable for at least the same reasons.

Accordingly, withdrawal of this objection is respectfully requested.

Application No.: 10/774,571

Docket No.: 05516/106002

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0591, under Order No. 05516/106002 from which the undersigned is authorized to draw. Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Dated: July 22, 2005

Respectfully submitted,

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